



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,036	12/28/2004	Mark Donaldson	21964.27900	9377
7590 Brouse McDowell Suite 500 388 South Main Street Akron, OH 44311-4407				
			EXAMINER	
			MEL XU	
			ART UNIT	PAPER NUMBER
			2615	
			MAIL DATE	DELIVERY MODE
			04/11/2008 PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,036

Applicant(s)

DONALDSON ET AL.

Examiner

Xu Mei

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-12 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1-6 and 9 is/are allowed.
6) ☐ Claim(s) 10-12 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. This communication is responsive to the applicant's amendment dated 01/31/2008.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by McIntosh (US-6,278,786).

Regarding claims 10-11, McIntosh discloses an active noise cancellation headset system. McIntosh's disclosure comprises a method of allowing a plurality of headphones having different acoustic properties to provide noise cancellation with a noise cancellation circuit operable over a predetermined phase range of noise cancellation input signals (the noise canceling headset system of McIntosh is capable of use for different headphones that including its own earcup speakers and error microphones that is considered with different acoustic properties as shown in Fig. 8), the method including the step of: providing at least one of the headphones with a passive filter (conventional compensation filter H_{comp} in Fig. 3 is a nonadaptive filter that can be considered as the broadly claimed passive filter) configured to modify the output

Art Unit: 2615

of a sound transducer (12) associated with the at least one headphone so that the filter provides a noise cancellation input signal for the noise cancellation circuit which is within the predetermined phase range.

Regarding claim 11, see col. 4, line 60-col. 5, line 7 for determining the operating condition of the passive filter based on the monitoring condition of a microphone (18) error signal within the headset, i.e., an acoustic property of a selected headphone as claimed.

Regarding claim 12, a feedback signal provided by a microphone 18 is appropriately conditioned or normalized by filter H_{comp} for a generic active noise cancellation circuit (i.e., ANC components such as 22, DSP, 24, and anti-noise speaker 16 as shown in Fig. 3).

Allowable Subject Matter

4. Claims 1-6 and 9 allowed over prior art of record.

Response to Arguments

5. Applicant's arguments filed 01/31/2008 have been fully considered but they are not persuasive.

In response to applicant's argument that the McIntosh reference rather shows 'matching/matched headsets' and does not disclose 'a plurality of headphone having different acoustic properties'; the examiner disagreed. As stated and explained in the rejection above, the noise canceling headset system of McIntosh as shown in Fig. 8 is

capable of use for different headphones that including its own earcup speakers and error microphones (col. 5, lines 37-38), this is broadly interpreted as each of the headphones or headsets is different from each other, contrary to the applicant's assertion of the headsets are 'matching/matched headsets'. Furthermore, such assertion regarding the headsets are 'matching/matched headsets' is nowhere to be found or mentioned in the McIntosh reference. And with the different headsets being disclosed and shown in Fig. 8 by McIntosh, it's clear that each of the headsets is considered with different acoustic properties with respect to each other.

In response to applicant's argument that the conventional compensation filter H_{comp} as discloses by the McIntosh reference is not a passive filter, the examiner disagreed. The broadly claimed 'passive filter' is reasonable to be interpreted by one of ordinary skill in the art as a non-active or nonadaptive filter that is nonactive or nonadaptive and act upon an input signal. The conventional compensation filter H_{comp} as discloses by the McIntosh reference is a nonadaptive filter that is acted upon receiving an input analog error signal (col. 3, lines 41-44) to provides a noise cancellation signal, and thus met the broadly claimed 'passive filter' as recited in claim 10.

As these are the totality of arguments presented, and they have been found unpersuasive, the existing rejection is deemed appropriate.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xu Mei whose telephone number is 571-272-7523. The examiner can normally be reached on maxi flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Xu Mei/
Primary Examiner, Art Unit 2615
04/03/2008